

State of California
DEPARTMENT OF FISH AND GAME
Land Management and Monitoring Program
South Coast Region

MITIGATED NEGATIVE DECLARATION

PROJECT: RANCHO JAMUL ECOLOGICAL RESERVE LAND MANAGEMENT PLAN

LEAD AGENCY: California Department of Fish and Game

Availability of Documents: The Mitigated Negative Declaration and Initial Study Checklist are available for public review at:

- California Department of Fish and Game
4949 Viewridge Avenue
San Diego, CA 92123
- San Diego County Library
Rancho San Diego Branch
11555 Via Rancho San Diego
El Cajon, CA 92019
- California Department of Parks and Recreation website
<http://www.dfg.ca.gov/html/pubnotice.html>

PROJECT DESCRIPTION:

The proposed project is the approval and implementation of an initial Rancho Jamul Ecological Reserve (RJER) Land Management Plan (LMP). The reserve provides numerous public use opportunities as well, including recreation, managed hunting, scientific study, and education. Maintenance activities included in the LMP are:

- Eradication of castor bean and other invasive non-native species from a 35.3-acre riparian area in the southern portion of Dulzura Creek
- Passive management of 151.8 acres for restoration of Diegan coastal sage scrub.
- Active management to maintain and/or restore 18.3 acres of grassland habitat
- Restoration of 5.5 miles of trails by decompaction, imprinting with native seeds, and active weed management which may include use of herbicide with protection of native plants from spray.
- Introduction of burrowing owls to select areas.
- Fire management by thinning and controlled burns.

- The ongoing operation of the RJER, including the public uses incorporated in the LMP.
- Management of existing 303.6-acre hunting area.
- Management and possible restoration of existing 279.6-acre closed area.
- Management of existing trails and hunting parking areas in the RJER.
- Remove 10.5 miles of fences that impede wildlife movement.

Construction activities included in the LMP are:

- Main access gate at SR 94.
- 13.6-acre interpretive area near the main entrance (see Figure 13). This facility will be designed at a later date and subjected to a subsequent environmental review.
- 2 unpaved parking areas.
- 6 access gates at perimeter of the RJER (see Figure 14).
- 4 internal access gates.
- Approximately 800 feet of fence at the eastern boundary line and approximately 294 feet of fence near the main public access gate.
- Viewing platform near the old Jamul Cement Works kiln.

The ongoing operation of the RJER includes the public uses incorporated in the LMP. Public uses that would be permitted under the LMP include hunting, environmental education, wildlife viewing and nature study, select equestrian use, hiking, and, environmental education.

A copy of the Initial Study is attached. Questions or comments regarding this Initial Study/Mitigated Negative Declaration should be submitted in writing to:

Terri Stewart, Senior Biologist, Supervisor
 Land Management and Monitoring Program
 California Department of Fish and Game
 4949 Viewridge Avenue
 San Diego, CA 92123
 858) 467-4209

Pursuant to Section 21082.1 of the California Environmental Quality Act, the California Department of Fish and Game (DFG) has independently reviewed and analyzed the Initial Study

and Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of DFG. DFG, as lead agency, also confirms that the project mitigation measures detailed in these documents are feasible and will be implemented as stated in the Mitigated Negative Declaration and Initial Study.

Terri Stewart,
Supervisor

Date

Larry Eng,
Regional Manager

Date

ENVIRONMENTAL CHECKLIST

The Rancho Jamul Ecological Reserve (RJER) Land Management Plan (LMP) is a project as defined by the California Environmental Quality Act (CEQA) that requires environmental analysis. This Environmental Checklist has been prepared by the California Department of Fish and Game (Department) in conformance with the requirements of the State CEQA Guidelines.

The Department conducted two public meetings, one on April 24, 1998, to initiate the planning process with the public and receive comments from interested parties about the reserve, and a second meeting on April 17, 2002 to gather more information on the reserve and the newly added Conservation Education Center. Approximately 65 people attended the first meeting which was held at the Jamul Primary School, and 37 attended the second meeting held at the Department headquarters facilities at RJER. Sixty-five persons presented verbal comments at the first meeting, 37 at the second, and only 3 written comments were received at the second meeting. The comments generally addressed the issues of hunting, public access, upstream water sources, relationship to the County of San Diego Multiple Species Conservation Program (MSCP), wildlife linkages, access for disabled persons, source of funds used to purchase the property, current and future use of all-terrain vehicles, big game hunting, coordination with County of San Diego Trails Master Plan, and compatibility of passive management with active uses. The issues raised have been addressed in the Plan and in this Environmental Checklist analysis. Copies of the letters received and a transcript of the public comments are available at the Department's offices at 4949 Viewridge Avenue, San Diego, CA 92123.

Table 1

| Topic | LMP | Environmental Checklist |
|--|------------|--------------------------------|
| Hunting | | 23, 25 |
| Public access | | 4-6 |
| Upstream water sources | | 26 |
| Relationship to the County of San Diego Multiple Species Conservation Program (MSCP) | | 2. 21-22, 27-28 |
| Wildlife linkages | | 22, 26 |
| Access for disabled persons | | - |
| Current and future use of all-terrain vehicles | | 5 |
| Big game hunting | | 23, 25 |
| Coordination with the County of San Diego Trails Master Plan | | 27 |
| Compatibility of passive management with active uses | | 2-6, 21-22 |

Environmental Checklist Form

1. **Project Title:** Rancho Jamul Ecological Reserve Land Management Plan

2. **Lead agency name and address:**
California Department of Fish and Game
4949 Viewridge Avenue
San Diego, CA 92123

3. **Contact person and phone number:**
Terri Stewart, Senior Biologist, Supervisor
Land Management and Monitoring Program
(858) 467-4209

4. **Project location:**
The 4,701.5-acre Rancho Jamul Ecological Reserve (RJER) is located within the County of San Diego Jamul/Dulzura Subregional Plan area. The Jamul/Dulzura Subregion covers an area of approximately 168 square miles located south of Loveland Reservoir and the Sweetwater River, north of the Mexican border, and southeast of the cities of La Mesa and El Cajon, and the unincorporated Rancho San Diego community.

RJER is immediately adjacent to State Route (SR) 94 and the Hollenbeck Canyon Wildlife Area (see Figure 1). The community of Jamul is to the northwest and the community of Dulzura is to the southeast (see Figure 2). The aerial photograph (Figure 3) illustrates the physical features of the site and surrounding land uses.

5. **Project sponsor's name and address:**
California Department of Fish and Game
4949 Viewridge Avenue
San Diego, CA 92123

6. **General plan designation:**
County of San Diego: General Agriculture and
Specific Plan Area

7. **Zoning:**
County of San Diego
General Agriculture (A-72)
Specific Planning Area (S-88)

8. **Description of project:**
The proposed project is the approval and implementation of an initial Rancho Jamul Ecological Reserve (RJER) Land Management Plan (LMP). As an ecological reserve, RJER provides different land use opportunities than were historically available at the site. The primary purpose of an ecological reserve is "to protect threatened or endangered native plants, wildlife, or aquatic organisms or specialized habitat types, both terrestrial and aquatic, or large heterogeneous natural gene pools" (Fish and Game Code, Section 1580, Appendix A). However, the reserve provides numerous public use opportunities as well, including recreation, managed hunting, scientific study, and education. All public use in the RJER is, and will continue to be, compatible with the protection of the biological resources of the reserve.

The LMP is consistent with the Multiple Species Conservation Program (MSCP)/Natural Communities Conservation Plan (NCCP). The MSCP was developed to conserve the diversity and function of the ecosystem through the preservation and adaptive management of large blocks of interconnected habitat and smaller areas that support rare vegetation communities. Maintaining ecosystem functions and persistence of extant populations of sensitive species is the biological goal of the MSCP. A Multiple Habitat Planning Area (MHPA) identified by the MSCP traverses the RJER and the adjacent Hollenbeck Canyon Wildlife Area (HCWA) as well as nearby U.S. Forest Service (USFS) and Bureau of Land Management (BLM) lands.

The purpose of the LMP is to establish management goals and objectives that are compatible with ecological reserve management principals. Appropriate public uses of the property are identified that are compatible with the Department's mission. The LMP's management guidelines include:

- 1) The adaptive management of habitats, species and programs to achieve the Department's mission to protect and enhance wildlife values.
- 2) Appropriate public uses of the property.
- 3) A descriptive inventory of wildlife and native plant habitats, which occur on or use the property.
- 4) An overview of the property's operation and maintenance, and personnel requirements to implement management goals, as well as serving as a budget planning aid for annual regional budget preparation.
- 5) A description of potential and actual environmental impacts and subsequent mitigation which may occur during management.

This Initial Study analyzes the whole of the proposed project, including the following project components:

- Approval of the RJER LMP.
- Maintenance activities to sustain the RJER and its habitats, including control of non-native, invasive species and restoration of disturbed areas. Specific activities included in the LMP are:
 - Eradication of castor bean and other invasive non-native species from a 35.3-acre riparian area in the southern portion of Dulzura Creek (see LMP Figure 14).
 - Passive management of 151.8 acres for restoration of Diegan coastal sage scrub (see LMP Figure 14).
 - Active management to maintain and/or restore 18.3 acres of grassland habitat (see LMP Figure 14).
 - Restoration of 5.5 miles of trails by decompaction, imprinting with native seeds, and active weed management which may include use of herbicide with protection of native plants from spray (see attached Figure 4).
 - Introduction of burrowing owls to select areas.
 - Fire management by thinning and controlled burns.
 - The ongoing operation of the RJER, including the public uses incorporated in the LMP (see attached Figure 4).
 - Management of existing 303.6-acre hunting area (see LMP Figure 13).
 - Management and possible restoration of existing 279.6-acre closed area (see LMP Figure 13).
 - Management of existing trails and hunting parking areas in the RJER (see LMP Figure 13).
- Construction of the following improvements:

- Main access gate at SR 94 (see LMP Figure 14).
 - 13.6-acre interpretive area near the main entrance (see LMP Figure 13). This facility will be designed at a later date and subjected to a subsequent environmental review.
 - 2 unpaved parking areas (see LMP Figure 13).
 - 6 access gates at perimeter of the RJER (see LMP Figure 14).
 - 4 internal access gates (see LMP Figure 14).
 - Approximately 800 feet of fence at the eastern boundary line and approximately 294 feet of fence near the main public access gate (see LMP Figure 13).
 - Viewing platform near the old Jamul Cement Works kiln (see “View Point” on LMP Figure 13). Located in non-native grassland.
- Remove 10.5 miles of fences that impede wildlife movement (see LMP Figure 14).
 - Ongoing coordination with public and private entities consistent with the objectives of the LMP.
 - The dissemination of public information regarding the RJER.
 - Regular updating of RJER regulations.
 - Enforcement of all applicable laws and regulations.

Public uses that would be permitted under the LMP include the following:

- Hunting - dove, quail, and pheasant are hunted on the reserve in designated areas. RJER has 20 days of hunting per year with each hunt allowing a maximum of 40 people to participate. Table 2 on the following page lists the dates of each of the hunts scheduled for the 2005-06 season. Most hunting days are divided into morning and afternoon hunts, increasing the number of people who can participate. Typical hunter density during non-peak season is approximately 20 to 30 people on opening days, 5 to 10 people on non-opener weekend days and 2 to 5 people on weekdays.
- Hunters may hunt with shotguns and archery equipment only; no pistols or rifles are allowed due to safety concerns, and no target practice is allowed. Falconry is generally prohibited at ecological reserves, but may be allowed as a hunting method through an area-specific special regulation. This method is not currently allowed at RJER; moreover, the presence of raptors that could attack hunting falcons may make this method infeasible at this location.
- Environmental education, wildlife viewing and nature study - although the number of outdoor education visitors is not large, occasional small and large groups, including school field trip groups, are hosted by Department staff. The Department uses the hay barn at the former ranch compound as an outdoor education center. Picnic tables have been placed under the roof for visitor groups to use.
 - Horseback riding - No general equestrian use is permitted. However, select equestrian use may be permitted on a case by case basis to local equestrian. The permit process requires that riders outline their route, which must use existing roads and trails. From 20 to 100 people participate in each ride. Equestrian use is not allowed for three days after significant rain events. Most equestrians enter the area from the main entrance; however, some enter by trails from adjacent lands.

- Hiking - the current system of access by permit limits the amount of hiking activity, although hiking occurs in conjunction with other uses such as hunting and environmental education. Hiking occurs on existing roads only, although hunters may walk off-trail while hunting. In the future, the RJER will be open to the public from dawn until dusk.
- Research - monitoring of habitats and the numerous sensitive species found on the ecological reserve is being done by Department biologists as well as several contract biologists. In addition, graduate students from local universities have conducted research or are currently working on projects such as habitat quality and species home range studies.
- Unauthorized uses – general equestrian uses are not allowed. Mountain biking is prohibited on RJER, although some unauthorized riding may occur (e.g., biking is allowed at the Department's adjacent Hollenbeck Canyon Wildlife Area, which may result in some "spill-over" use at RJER). All public motorized vehicle use is also prohibited, including use of standard vehicles, motorcycles, and all-terrain vehicles (ATV's). No overnight use is permitted, and dumping of any kind is strictly prohibited.

A single public access point to RJER is located on SR 94 (Figure 3). Currently, public access to RJER is by special permit only and public uses are limited to those listed above. RJER is otherwise closed to the public. Expanded public access that will not require permits may be allowed in the future, but is currently being withheld to allow restoration projects to be completed and the recovery of areas that were burned (approximately 80% of the reserve) during the October 2003 Otay Fire. Other reasons for limiting current public access are the presence of open wells that pose a safety hazard and the need to protect historical and cultural resources from human disturbance.

9. **Surrounding land uses and setting: Briefly describe the project's surroundings:**

The unincorporated community of Jamul is located north and west of the RJER (see Figures 1 and 2). The Hollenbeck Canyon Wildlife Area is located along the northeast boundary (SR 94) of RJER. The areas to the east, south and west are vacant as shown in Figure 3. Otay Lakes Road traverses the RJER and generally follows the southeast boundary of the reserve.

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement).**

No other public agency approval is required for the adoption of the RJER LMP.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

If implemented as written, this LMP would not result in a "Potentially Significant Impact" involving the environmental factors listed below, as documented in the Environmental Checklist/Initial Study on the following pages.

| | | | | | |
|--------------------------|-------------------------------|--------------------------|------------------------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | Aesthetics | <input type="checkbox"/> | Agriculture Resources | <input type="checkbox"/> | Air Quality |
| X | Biological Resources | X | Cultural Resources | <input type="checkbox"/> | Geology /Soils |
| <input type="checkbox"/> | Hazards & Hazardous Materials | <input type="checkbox"/> | Hydrology / Water Quality | X | Land Use / Planning |
| <input type="checkbox"/> | Mineral Resources | <input type="checkbox"/> | Noise | <input type="checkbox"/> | Population / Housing |
| <input type="checkbox"/> | Public Services | <input type="checkbox"/> | Recreation | <input type="checkbox"/> | Transportation / Traffic |
| <input type="checkbox"/> | Utilities / Service Systems | <input type="checkbox"/> | Mandatory Findings of Significance | | |

DETERMINATION

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature and Title

Date

Signature and Title

Date

EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, and then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) The significance criteria or threshold, if any, used to evaluate each question; and
 - b) The mitigation measure identified, if any, to reduce the impact to less than significance

Environmental Analysis

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|--------------------------------------|--|------------------------------------|--------------|
| I. AESTHETICS -- Would the project: | | | | |
| a) Have a substantial adverse effect on a scenic vista? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| II. AGRICULTURE RESOURCES -- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project: | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|--------------------------|
| III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> |
| d) Expose sensitive receptors to substantial pollutant concentrations? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| e) Create objectionable odors affecting a substantial number of people? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| IV. BIOLOGICAL RESOURCES -- Would the project: | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|------------------------------|--------------------------|
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | <input type="checkbox"/> | <input type="checkbox"/> | X | <input type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| V. CULTURAL RESOURCES -- Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in State CEQA Guidelines Section 15064.5? | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines Section 15064.5? | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| VI. GEOLOGY AND SOILS -- Would the project: | | | | |

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|------------------------------|-----------|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| ii) Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| iii) Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| iv) Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| b) Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| VII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project: | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|------------------------------|-----------|
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| VIII. HYDROLOGY AND WATER QUALITY -- Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|--|---|--|---|----------------------|
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| f) Otherwise substantially degrade water quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| j) Inundation by seiche, tsunami, or mudflow? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|--------------------------------------|--|------------------------------------|--------------------------|
| IX. LAND USE AND PLANNING -- Would the project: | | | | |
| a) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | X | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| X. MINERAL RESOURCES -- Would the project: | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| XI. NOISE -- Would the project result in: | | | | |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|---|--------------------------------------|--|------------------------------------|--------------|
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| XII. POPULATION AND HOUSING -- Would the project: | | | | |
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| XIII. PUBLIC SERVICES | | | | |
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| Fire protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| Parks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|--------------|
| XIV. RECREATION -- | | | | |
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| XV. TRANSPORTATION/TRAFFIC -- Would the project: | | | | |
| a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| e) Result in inadequate emergency access? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| f) Result in inadequate parking capacity? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| XVI. UTILITIES AND SERVICE SYSTEMS -- Would the project: | | | | |

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|--------------|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| XVII. MANDATORY FINDINGS OF SIGNIFICANCE -- | | | | |
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
|--|---|--|---|----------------------|
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | X |

EXPLANATIONS TO CHECKLIST ANSWERS

I. AESTHETICS

a), b), c), and d). No Impact.

There are no designated scenic vistas in the area surrounding RJER and none of the local roadways are designated as scenic routes by the California Scenic Highway Program. However, the County of San Diego Scenic Highway Element designates SR 94 and Honey Springs Road from SR 94 to Lyons Valley Road as Third Priority Scenic Routes. The project would not adversely affect a scenic vista, natural resources, historic buildings, or SR 94 and Honey Springs Road because no new structures will be constructed, no designated historic structures would be removed, and the existing landform within the RJER would remain in its natural state. Infrastructure development would be limited the construction of a main access gate at SR 94, a parking area and interpretive area near the main access gate, 6 perimeter access gates, 4 internal access gates, and approximately 1,125 feet of fence. No outdoor lighting would be installed on the site. The proposed project would preserve existing native vegetation and natural visual resources.

II. AGRICULTURAL RESOURCES

a), b), and c). No Impact.

Historically, the property has been used for farming, grazing, cattle ranching, and cement production. Over the years, various crops have been planted, including spineless cactus, Turkish tobaccos, grain crops, and fruit orchards. Farming and ranching operations ceased prior to its acquisition by the State of California in 1997. The site is not under a Williamson Act contract. The majority of the site is mapped as grazing land with interspersed areas mapped as farmland of local importance and small areas of prime farmland. The RJER would conserve the existing land and vegetation resources found on the site and no clearing of vegetation or development of the land is proposed that would hinder future agriculture uses. However, agriculture is not a permitted use within ecological reserves.

III. AIR QUALITY

a), b), and c). Less Than Significant Impact.

d) and e). No Impact.

San Diego County is in non-attainment for the 1-hour concentrations under the California Ambient Air Quality Standard (CAAQS) for Ozone (O_3). San Diego County is also in non-attainment for the annual geometric mean and for the 24-hour concentrations of Particulate Matter less than or equal to 10 microns (PM_{10}) under the California Ambient Air Quality Standards (CAAQS). Volatile organic compounds (VOC) sources include any source that burns fuels (e.g., gasoline, natural gas, wood, and oil); solvents; petroleum processing and storage; and pesticides. Sources of PM_{10} in both urban and rural areas include: motor vehicles, wood burning stoves and fireplaces, dust from construction, landfills, agriculture, wildfires, brush/waste burning, and industrial sources of windblown dust from open lands.

Operation of the RJER project will not result in emissions of significant quantities of criteria pollutants listed in the California Ambient Air Quality Standards or toxic air contaminants as identified by the California Air Resources Board. Increases in vehicular trips would be minimal because the LMP proposes no new activities that would attract a substantial number of visitors and automobile trips to the site. Further, there are no substantial grading operations associated with the project. There are no sensitive receptors such as schools in the project vicinity and the activities at the RJER would not produce odors. Consequently, the project will not result in a cumulatively considerable net increase of PM_{10} , or any O_3 precursors. Consequently, the project will not conflict or obstruct with the implementation of the Regional Air Quality Strategy (RAQS) or the State Implementation Plan (SIP) on a project or cumulative level.

IV. BIOLOGICAL RESOURCES

a), b), c). Less Than Significant with Mitigation Incorporation.

d). Less Than Significant Impact.

e) and f). No Impact.

Twenty-six vegetation types and two additional land cover types (i.e., areas that do not support vegetation) have been mapped within the RJER. Scrublands (Diegan coastal sage scrub, chamise chaparral, disturbed ceanothus

chaparral, and scrub oak chaparral) cover 56% of the site. Native and non-native grasslands have been mapped on 35% of the site. Riparian habitats (southern coast live oak, southern arroyo-willow, sycamore woodland, southern willow scrub, mulefat scrub) occupy 3% of the site. Upland woodlands occur on less than 1% of the site, as does open water and developed lands. Approximately 5% of the site is classified as disturbed habitat.

A total of 231 species of flora are documented as occurring within the RJER. Of these 231 species, 170 (74%) are native species and the remaining 61 (26%) are non-native species. The two largest plant families in the County are also the families with the most species present on the RJER, with 44 taxa in the Asteraceae family and 30 taxa in the Poaceae family. Similar to the pattern observed for the native taxa, the highest number of non-native taxa within RJER also belongs to the Asteraceae family (15 observed) and Poaceae family (21 observed). The high number of native species reflects the large amount of contiguous natural habitat within the RJER that would promote plant species diversity. In addition, a number of areas in the RJER are underlain by clay, gabbros, and metasedimentary soils, which would also contribute to plant diversity by creating a mosaic of different substrates.

Seventy-three types of insects have been observed since the Department took ownership of the property, including two families of Odonata (dragonflies and damselflies), four families of Orthoptera (grasshoppers, crickets, and katydids), eight families of beetles, five families of bees and wasps, 21 species of ants, and 21 species of butterflies. A total of five native amphibian species (one salamander, one frog and two toads) were identified in the LMP area. A total of 22 species of native reptiles have been documented, including 10 lizards and 12 snakes.

RJER supports a rich diversity of bird species. Diurnal and nocturnal surveys, point counts, and incidental observations during 1997-2004 identified 113 native species. Coastal sage scrub habitat was found to support the greatest number of species due in part because it is the most common on-site habitat type (55%). Riparian habitat also supports high species diversity, contributing 49% of all species surveyed in 2001-2002 even though it covers less than 3% of RJER. Chaparral and oak woodland cover approximately 1.5% of the LMP area, and contributed 22% and 21% respectively of all species observed in 2001-2002. Grassland habitat (35% of the site) supports the least avian biodiversity.

A total of 38 species of native mammals have been documented within the RJER, including Audubon's cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), San Diego pocket mouse (*Chaetodipus fallax fallax*), cactus mouse (*Peromyscus eremicus*), western harvest mouse (*Reithrodontomys megalotis*), and deer mouse (*Peromyscus maniculatus*). Other small mammals identified onsite include two species of shrews (*Notiosorex crawfordi* and *Sorex ornatus*), brush rabbit (*Sylvilagus bachmani*), three species of kangaroo rats (*Dipodomys agilis*, and *D. simulans*), California vole (*Microtus californicus*), desert woodrat (*Neotoma lepida*; state species of concern), and California mouse (*Peromyscus californicus*). Twelve species of bats were also identified. The small mammal assemblage and mule deer (*Odocoileus hemionus*) that are present on RJER provide a solid prey base for the medium to large carnivores. Predators documented in the LMP area are the coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), long-tailed weasel (*Mustela frenata*), bobcat (*Lynx rufus*), and mountain lion (*Puma concolor*). Although the raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), western spotted skunk (*Spilogale gracilis*), and non-native Virginia opossum (*Didelphis virginiana*) also eat small mammals, they have a more diverse diet preference and will scavenge for invertebrates, frogs, lizards, birds, eggs, acorns, and fruit.

A total of seven listed species have been observed throughout the reserve. Riparian species include the least Bell's vireo and the red-legged frog (*Rana aurora draytonii*); however, the red-legged frog is thought to have been extirpated from the county and is not expected to occur in the reserve. In addition, although not strictly a riparian species, San Diego ambrosia was recorded near the edge of Jamul Creek near Otay Lakes Road. The peregrine falcon is also commonly found near creeks, as well as inland lakes and coastal waters during the non-breeding season. A single observation was made in 2001 near Dulzura Creek. Upland species documented from the reserve include the Otay tarplant, which occurs in non-native grassland north of Thousand Oaks Campground, California gnatcatcher, a coastal sage scrub species, and Quino checkerspot butterfly (QCB) which occurs in open scrub or grassland habitat.

Habitat protection and enhancement are primary goals of the RJER, and all management and maintenance activities will comply with state and federal endangered species regulations as well as the County of San Diego MSCP

requirements. The goals of the RJER include preserving the MSCP identified regional wildlife corridors that connect to preserved areas on adjacent lands. The identified habitat linkages and wildlife corridors will be retained intact and no barriers to wildlife movement will be constructed.

The following management activities will result in a net benefit to sensitive natural resources in the RJER - active and passive restoration, habitat enhancement, species re-introduction, and sensitive species conservation. Although the primary goal of the RJER is to protect sensitive biological resources, management actions such as surveys and monitoring, erosion and sediment control, restoration activities, species re-introduction projects, invasive non-native plant eradication, non-native wildlife control, and game management could adversely impact biological resources within the RJER.

All management and research activities will be assessed for potential direct or indirect impacts prior to implementation of each management activity. The majority of impacts that could result from management activities are expected to be temporary (e.g., noise and dust resulting from the use of heavy equipment). To the extent feasible, all future management activities will incorporate appropriate avoidance measures such as temporary fencing to protect riparian areas from grazers, prescribed burn protocols, appropriate use of herbicides and pesticides, etc. into the design of the management activity. These impact avoidance measures will minimize the potential for biological resource impacts. However, some impacts to biological resources may be unavoidable. Implementation of the following mitigation measures would reduce these impacts to a less than significant level.

- Surveys and monitoring will be performed by a qualified biologist.
- Surveys and monitoring will follow protocols established by the Department and the U.S. Fish & Wildlife Service.
- Best management practices (BMPs) will be implemented whenever erosion or sedimentation could result from management activities.
- Any habitat impact resulting of the use of heavy equipment will be restored to its original condition.
- Activities that would directly or indirectly affect habitat occupied by sensitive species shall be conducted during the non-breeding season of the species in the project area.
- New facilities will be placed in disturbed habitat whenever possible.
- Temporary staging areas will be revegetated following the completion of construction.
- Hand tools rather than mechanized equipment will be used whenever feasible.

Potential direct and indirect impacts may also result from the public's use of RJER. The uses that may result in impacts include: (1) the overuse of trails, open areas, or parking lots; (2) unauthorized use of closed areas; (3) conflicts among users; and (4) accidents involving wildlife (e.g. road kill). These impacts will be reduced to a less than significant level by implementation of the following mitigation measures:

- Managing visitation to an appropriate level.
- Preventing unauthorized activities through daily observation of visitor activities.
- Promptly repairing damaged trails, parking areas, etc.
- Installing educational signs and/or display cases to educate and inform the public regarding rules and regulations governing the use of the RJER and access restrictions.
- Regularly monitoring public use effects on existing ecosystems.
- Closing trails where use is determined to have, or potentially have, an adverse effect on sensitive biological

or cultural resources.

V. CULTURAL RESOURCES

- a) and b). Less Than Significant With Mitigation Incorporation.
- c) and d). No impact.

Recent surveys of RJER identified 135 prehistoric cultural sites and 62 isolate. The site types are: 75 bedrock milling, 31 lithic scatters, 15 quarries, 8 temporary camps, 5 habitation sites, and 1 potential ceremonial site. A potential ceremonial site (SDI-14,907) consists of a rock ring. Four of the 5 habitation sites contain dark midden soil. One of the habitation sites (SDI-9689) contains 23 features with 30 slicks, 13 ovals, 2 mortars, 1 cupule, and 1 pictograph. A small habitation site (SDI-14,758) is associated with a mano fragment, ceramics, and debitage. SDI-14,816 is a large habitation site and contains 62 features. This site has 104 slicks, one mortar, one cupule, and more than three rock enclosures. Artifacts associated with this site include debitage, projectile points, manos, hammerstones, ceramics, core tools, shell, and bone. The 62 isolated finds include flakes, flake or ground stone tools, projectile points, cores, historic ceramic and shell.

There are 7 historic cultural resources recorded within RJER. These cultural resources include a series of ditches and ponds, a reservoir (water reservoir), 2 historic foundations (Jamul Cement Works and historic rock foundation), 1 historic adobe (Robinson House), and 2 structure locations (Riley residence and Faquay residence). SDI-6967H, the Jamul Cement Works, contains kiln ruins and quarry pits. The historic rock foundation (SDI-14,761) is part of the G. Rennie residence. The Robinson house (SDI-14,826) consists of an adobe wall and foundations.

Several sites have been identified as a focus for future research, interpretation, and stabilization. The William Robinson house site (CA-SDI-14,826) contains a great deal of information about pioneering farmers in this region after 1860. Stabilization measures have been recommended for the Robinson house and the Jamul Cement Works (SDI-6967H). The Jamul Cement Works (SDI-6967H), provides an opportunity to learn about late 19th century cement-making technology and kilns. All sites were given a preliminary National Register evaluation based on surface survey data and archival and literature searches. Forty-five prehistoric sites, the Jamul Cement Works, and the William Robinson house with adobe ruins and three mid-to-late 19th century squatters' residences (Riley, G. Rennie, and Faquay residences) were tentatively evaluated as potentially eligible for the National Register of Historic Places (NRHP). One historic water reservoir was evaluated as a potentially contributing element to the Rancho Jamul Historic District. Eighty-five prehistoric sites (mostly small lithic scatters, bedrock milling stations without associated artifacts and quarries) and a series of ditches and ponds were evaluated as probably not eligible for the NRHP.

Public use of the RJER, and grading activities associated with maintenance and management could adversely affect historic or archaeological resources. Potential impacts would be reduced to less than significant level by the implementation of the following mitigation measures.

- Fencing or other barriers will be placed around identified cultural resource sites that could be disturbed by human encroachment such as hiking and hunting activities.
- All grading and construction activities, and active human use areas, will be sited to avoid known cultural resource sites to the extent feasible.
- A cultural resources investigation shall be conducted before any grading or public use occurs in an area that has not been surveyed for cultural resources. Approximately 1,393 acres of the RJER have not been surveyed for cultural resources.
- Cultural resource investigations will be conducted under the guidance of a qualified cultural resource professional, as defined by the Secretary of Interior's Professional Qualifications Standards.
- Cultural resource investigations and treatments shall be conducted in accordance with federal and state of California regulations and standards concerning cultural resources.

- A final report for each investigation will be filed at RJER, and with the South Coastal Information Center, which manages the Historical Resources Inventory database for San Diego County, under the direction of the California Office of Historic Preservation.
- Treatments of standing buildings and structures will be completed as defined in the Secretary of the Interior's Standards for the Treatment of Historic Properties. Treatments. Treatment options include preservation, restoration, rehabilitation, or reconstruction.

VI. GEOLOGY AND SOILS

a), b), c), d), and e). No Impact.

The San Ysidro Mountains to the south of the reserve and the Jamul and San Miguel Mountains to the west were part of a series of volcanic islands off the coast of California. Volcanic ash and breccia from these volcanoes metamorphosed to fine-grained rock of the Santiago Peak Volcanic Formation. To the east of these islands, a granitic and gabbroic batholith was uplifted to form the Peninsular Range. RJER lies near the contact of these two formations. Granitic boulders and granitic outcrops are present throughout Rancho Jamul. There are no known or suspected faults in or near the RJER.

Soils in the northern most portion of RJER are primarily Las Posas series, with areas of Cieneba and Placentia soils present at the highest elevations. Farther south, a large area is comprised of Visalia series soils, with higher elevation areas containing Cieneba soils. Jamul Creek runs through a stretch of Grangeville fine sandy loam, which is bordered by bands of Visalia sandy loam and an Escondido fine sandy loam. These latter two soil series are dominant along the remainder of the creek to where it merges with Dulzura Creek. The remainder of the property is composed of Friant rocky fine sandy loam with large pockets of cobbly loam of the Olivenhain series, and smaller pockets of Las Posas, Rough Broken Land, Bosanko, Auld and Huerfano Series soils. At the very southeastern portion of the reserve Dulzura Creek flows through soils of the Visalia and Ramona Series, Chino soils bordered by Escondido soils, and Visalia soils and a small patch of Riverwash soil as it leaves the property toward the Lower Otay Reservoir. Most of RJER consists of soils with a high potential for erosion. Recent fires (most notably, the Otay Fire of 2003) have left these soils even more vulnerable to erosion and will remain that way until natural vegetation returns.

The characteristics of the soil series present on the RJER site is presented in Table 3. Most of the soils have a severe erodibility potential and the runoff potential ranges from fairly low to very high. As shown in the suitability for public use column the Las Posas soils on slopes less than 15% and Escondido soils are rated unsuitable for heavy public uses; however, the Escondido soils good to fair suitability for paths. The Visalia and Grangeville solids are moderately to well suited for trails, paths, and roads. The Friant and Olivenhain soils are poorly suited to trails or heavy use.

Table 3. Characteristics of Soil Series within the Reserve

| Soil Series | Structure | Slope | Erodibility Potential | Runoff Potential | Suitability for Public Use |
|--------------------|---|--------------|------------------------------|-------------------------|--|
| Las Posas | stony, fine sandy loams with a clay subsoil | 2 - 65% | moderate | High | Areas with < 15% slope largely unsuitable for heavy use areas |
| Visalia | alluvial deposits of sandy loam, well drained | unknown | severe | fairly low | well suited to trails, paths, and moderately suitable for roads |
| Grangeville | alluvial fans of fine sandy loams, poorly drained | 0 - 2% | severe | fairly low | moderately suitable for paths, trails, and roads |
| Escondido | upland soils; very fine sandy loams | 5-30% | severe | fairly high | poor suitability for heavy use; good to fair suitability for paths; fair to poor suitability for roads |
| Friant | rocky fine sandy loam; shallow, well-drained, upland soil | 9 – 70% | severe | very high | poorly suited to paths, trails, and roads |
| Olivenhain | cobbly loam with a cobbly clay subsoil formed in gravel and cobble alluvium | unknown | severe | very high | poorly suited to trails, roads, or heavy use |

The RJER does not include the construction of facilities that require landform alterations, nor would the proposed use of the site result in soil erosion or the loss of topsoil. A small number of people will be present within the RJER at any one time and no septic systems or waste water disposal systems are proposed. Therefore, the proposed project would not expose people or property to substantial geologic hazards including seismic ground shaking or failure, liquefaction, landslides, unstable soils or geologic unit, subsidence, or expansive soils.

The LMP does not propose to construct new roads and only one new hunting trail. Most of the existing trails will only be used by Department staff for management purposes. The limited amount of hiking and equestrian activity permitted in the RJER will not result in degradation of trails that would increase soil erosion. Human activity that will be permitted within the RJER would not result in substantial amounts of soil erosion.

VII. HAZARDS AND HAZARDOUS MATERIALS

a), b), c), d), e), f), and g). – No Impact.

The RJER does not contain any known or suspected hazardous materials, nor have such materials been used on the site in the past. The management and operation of the RJER as identified in the LMP would not require the use or storage of any hazardous materials on-site. The site is not located within an airport land plan area nor is it within two miles of a public airport or private airstrip. Implementation of the LMP would not physically interfere with the County's adopted emergency response plan or evacuation plan because the amount of traffic generated by the LMP would not have a noticeable effect on traffic volumes on SR 94.

The LMP will not increase the potential for wildfire hazards because the intensity of human use at the site will be

very low. Potential adverse impacts with the implementation of the LMP's Fire Management Element will be avoided and/or reduced to a less than significant level by:

- Development, review, and approval of site-specific fire management plans for all fuel manipulation activities
- All fire management activities will be conducted by qualified Department and fire agency staff, or volunteers under the direction of Department and fire agency staff.
- Fuel management will be accomplished by mechanical clearing or burning conducted outside of the nesting and breeding periods for all sensitive animal species.
- Permits for controlled burns will be obtained from the California Department of Forestry (CDF). CDF permits require compliance with all CDF regulations and the permit requirements will be observed during a controlled burn.
- Fuel management activities will be conducted in a manner that will not contribute to fragmentation of habitat linkages.
- Following a fire, all areas burned will be monitored to assess invasion by non-native plant species. Remedial seeding or other measures will be conducted as needed. Weed-dominated habitats and non-native grasslands dry out earlier than native perennial species and are easily ignited.
- Areas damaged from fire suppression activities will be promptly revegetated or repaired.

VIII. HYDROLOGY AND WATER QUALITY

a), b), c), d), e), f), g), h), i), and j). No Impact.

RJER lies within the 93,000-acre Otay River Watershed, and is traversed by Jamul Creek and Dulzura Creek. Jamul Creek is a seasonal creek that drains the northern portion of the reserve. Dulzura Creek, located southeast of Jamul Creek, drains the southeastern portion of the reserve and merges with Jamul Creek approximately three miles southwest of SR 94. The main branch of Dulzura Creek transports water from Barrett Lake to Lower Otay Reservoir, both of which are operated by the City of San Diego. Mean daily flow data recorded between 1940 and 1997 indicate that seasonal flow rates range from approximately 5 cubic feet per second (cfs) in October to 68 cfs in March.

The project site is located in the Jamul (10.33) and Hollenbeck (10.35) Hydrologic Subareas as identified in the *Water Quality Control Plan for the San Diego Basin (9)* prepared by the California Regional Water Quality Control Board, San Diego Region (1994). These Subareas are within the Dulzura Hydrologic Area (10.30) of the Otay Hydrologic Unit (10.00). Identified beneficial uses of these inland surface waters include municipal, domestic water, industrial process, and agriculture water supply, contact and non-contact water recreation, warm fresh water, and wildlife habitat. The Clean Water Act *Section 303(d) List of Impaired Water Bodies* does not include any water bodies associated with the Jamul and Hollenbeck Hydrologic Subareas.

Implementation of the proposed RJER project would not violate any water quality standard or waste discharge permit because the project will not result in the discharge of water or wastewater. The project will not deplete or adversely affect groundwater because groundwater use will be limited to serving the RJER headquarters. The RJER would not alter any of the existing drainage courses by grading, construction of new buildings or impervious surfaces. The drainage pattern of the on-site creeks would not be altered, and the project would not increase the rate or amount of surface runoff. No housing units or other facilities would be constructed within a 100-year flood hazard area. Given its location, the project site is not subject to seiche, tsunami, or mudflow.

IX. LAND USE AND PLANNING

a) and c). – No Impact.

b). – Less than significant with mitigation incorporated.

The RJER would not divide an established community because it is located in a rural area. Implementation of the RJER LMP is consistent with the provisions of the *County of San Diego General Plan*, *Jamul/Dulzura Subregional Plan*. The LMP is also consistent with the “Metro-Lakeside-Jamul Segment” of the *County of San Diego MSCP Subarea Plan*. As noted in Section IV above, the Subarea Plan identifies a portion of the RJER in a northeast-southwest direction as a MHPA. The RJER LMP was specifically developed to comply with the goals of the MSCP, County of San Diego Subregional Plan, and land management plans for adjacent areas.

The proposed LMP is not entirely consistent with the *Jamul-Dulzura Community Trail and Pathway Plan* adopted by the County of San Diego. Some of the trails shown on the *Jamul-Dulzura Community Trail and Pathway Plan* as public trails and pathways are shown as “Management Only” trails on the RJER Public Use figure while other *Jamul-Dulzura Trails* are not included in the RJER trail system. In some instances, the alignments of individual trail segments are in different locations on the two trail plans. The Department shall resolve the conflict between the *Jamul-Dulzura Community Trail and Pathway Plan* and the *RJER LMP* through discussions with the County of San Diego and amending the two plans as mutually agreed upon to achieve consistency between the plans. Amending the plans to achieve consistency would reduce the impact to a less than significant level.

X. MINERAL RESOURCES

a) and b). – No Impact.

There are no known locally-important mineral resources within the RJER and none are delineated on the County General Plan or other land use plan. Activities proposed within the RJER would not involve the extraction of mineral resource, nor is mineral extraction a permitted use within an ecological reserve. The proposed project would not conflict with mineral resource protection plans or result in the loss of a known mineral resource.

XI. NOISE

a), b), c), d), e), and f). No Impact.

Implementation of the LMP and operation of the RJER would not result in any construction or human activity that would result in noise levels that exceed the standards established in the County of San Diego General Plan Noise Element and Noise Ordinance. None of the activities proposed by the LMP would result in groundborne vibration or noise levels. Consequently, there would be no short-term or long-term increase in ambient noise levels. Aircraft noise is not a factor at the RJER because there are no airports or private airstrips within a 2-mile radius of the site.

XII. POPULATION AND HOUSING

a), b), and c). No Impact.

The population of the Jamul/Dulzura subregion is approximately 9,000 people. It has several small rural or semi-rural communities including Jamul, Steele Canyon, Dulzura, and Barrett Junction. Jamul, the largest of these communities, and its surrounding hills and valleys accommodate a majority of the Subregion's population. The subregion is still rural in character since it has no sewer system and imported water service only in the northwestern portion of the area. The County's draft General Plan 2020 forecasts the buildout population will be approximately 21,400 people.

Implementation of the proposed project would not induce growth to the area because no housing or commercial activities would be constructed, nor would public services be extended to the area. No existing housing units would be removed nor would people be displaced.

XIII. PUBLIC SERVICES

a) and b). No Impact.

The intensity and frequency of public use in the RJER has been historically very low. The LMP will not require any fire, police, or other public services beyond those currently available. No new housing will be provided and no additional school or park services will be required.

The LMP would not exacerbate potential wildfire hazards because the intensity and frequency of human use of the project area would not substantially increase. The LMP's Fire Management Element will be implemented as

described in Section VII above. No increase of fire protection services from CDF or other fire districts will be required as a result of the implementation of RJER LMP.

XIV. RECREATION

a) and b). No Impact.

The RJER will not increase the usage of existing parks or recreational facilities because no new housing will be constructed. The proposed project will provide limited recreational use within the RJER. The very small number of recreational users will not exceed the carrying capacity of the natural resources or degrade existing natural features or recreational facilities. No new construction of active recreational facilities or other structures is proposed.

XV. TRANSPORTATION / TRAFFIC

a), b), c), d), e), f), and g). No Impact.

Human use of the RJER is very low, and the proposed project would not build any new structures or introduce uses that would generate a substantial number of new automobile trips. The only traffic related improvement proposed is a new, small unpaved parking area. No roadway improvements are proposed and the current emergency access to the site will be unaffected. No vehicular access is permitted on the dirt roads through the site (except for maintenance and emergency access). No alternative transportation systems exist at the site and none are proposed. Air traffic patterns will not be affected by the project.

SR 94 and Otay Lakes Road provide access to the site. SR 94 is classified as a Major Road (4 lanes) between the communities of Jamul and Dulzura, but is constructed as a 2-lane road. The 2004 traffic counts for this roadway reports 12,900 average daily trips (ADT) west of Honey Springs Road and 8,300 ADT east of Honey Springs Road. The level of service (LOS) on these segments is “D” and “C,” respectively. Otay Lakes Road west of SR 94 is classified as a 4-lane Collector, but is constructed as a 2-lane road. The 2004 traffic count on this road is 3,100 ADT with LOS “B.” Traffic generated by the LMP will not affect the LOS on these roadways and will not result in a substantial increase in traffic on these roadways.

XVII. UTILITIES AND SERVICE SYSTEMS

a), b), c), d), e), f), and g). No Impact.

A very small number of people use the RJER, and the proposed project would not generate any new demands for public utilities or services. No new septic or wastewater systems are proposed. No storm drain facilities exist and none are proposed; the project will not result in an increase of storm water runoff. Potable water is currently provided by on-site wells and no new water facilities are required. A minimal amount of solid waste is currently generated at the site and no increase is anticipated as a result of implementing the LMP.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

a. No Impact.

The Department currently manages the RJER to protect rare, threatened or endangered native plants, wildlife, aquatic organisms, and specialized terrestrial or aquatic habitat types. Other activities include scientific study, research, and education. Although public use and enjoyment of the reserve is encouraged, the uses must remain consistent with the primary goal of natural resources protection.

The LMP is consistent with the Multiple Species Conservation Program (MSCP)/Natural Communities Conservation Plan (NCCP). The MSCP was developed to conserve the diversity and function of the ecosystem through the preservation and adaptive management of large blocks of interconnected habitat and smaller areas that support rare vegetation communities. Maintaining ecosystem functions and persistence of sensitive species is the biological goal of the MSCP. A biological resource core area identified by the MSCP traverses the RJER and the adjacent Hollenbeck Canyon Wildlife Area (HCWA), as well as nearby U.S. Forest Service (USFS) and Bureau of Land Management (BLM) lands.

The RJER LMP will not result in adverse effects to the existing habitat, wildlife species or cultural resources. It does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

b. – No Impact.

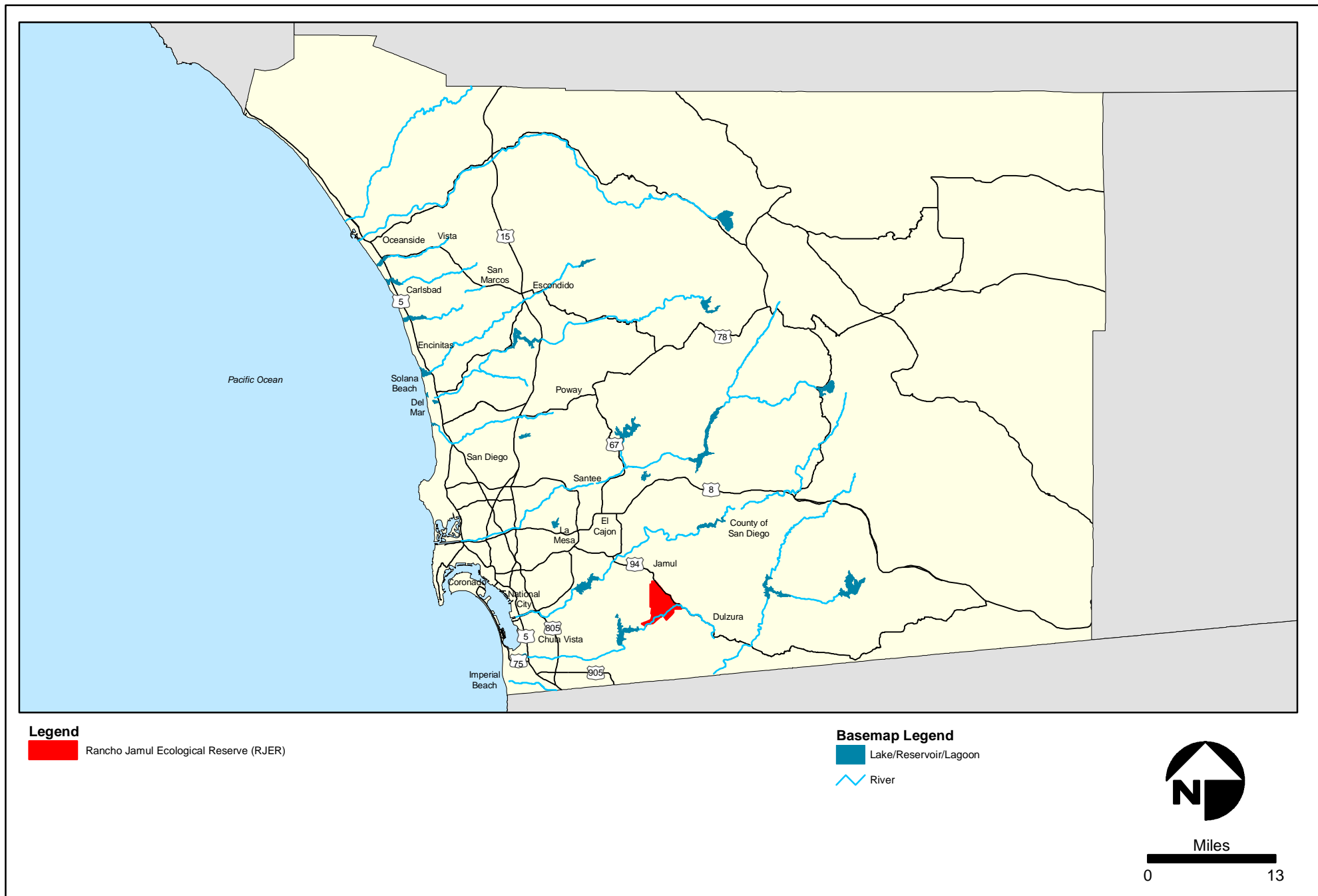
The LMP does not authorize any substantive physical changes and future projects, if any, will require subsequent environmental analysis when the specifics of a project are established. There are no impacts that are individually limited, but cumulatively considerable.

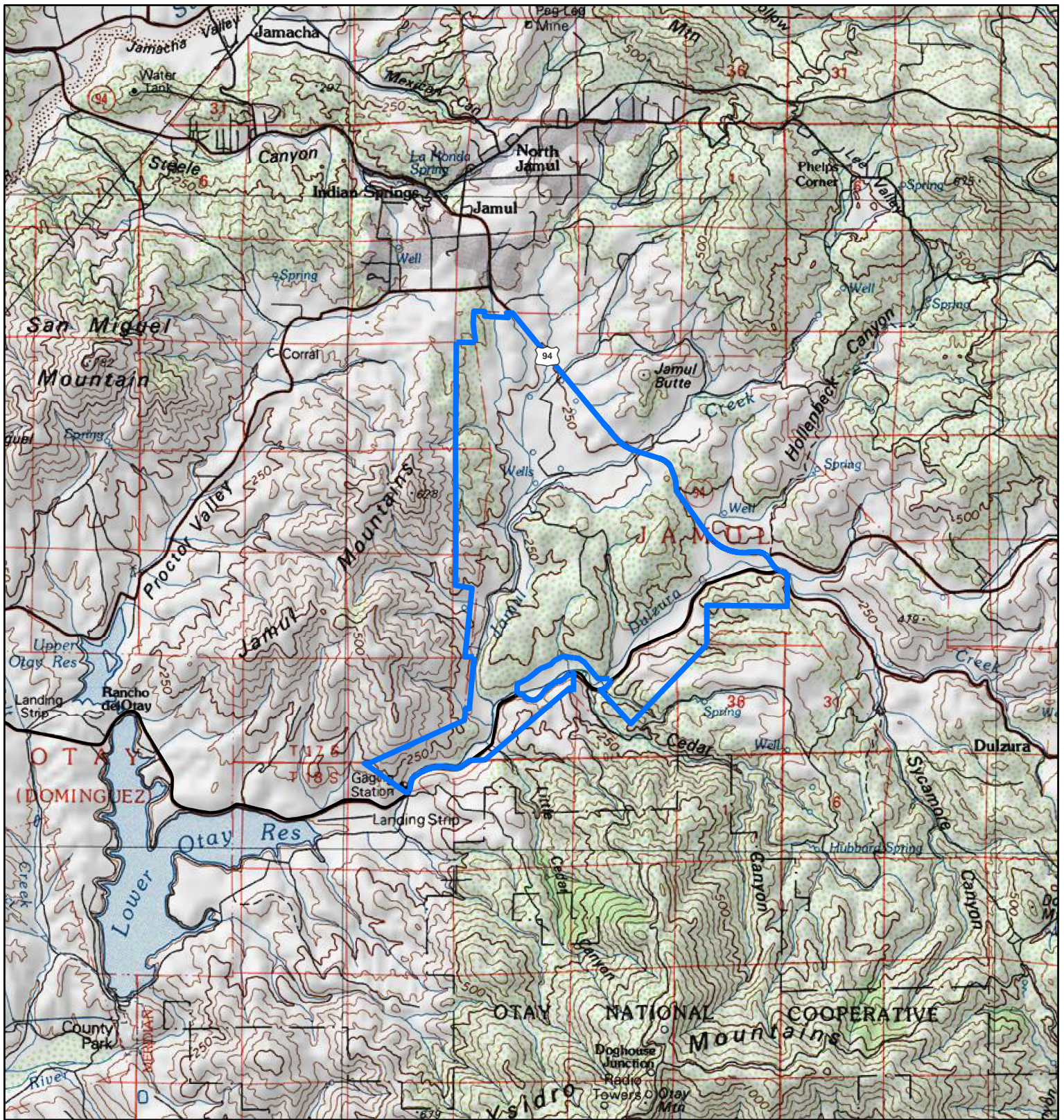
c. – No Impact.

Implementation of the LMP would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

INFORMATION SOURCES:

1. California Department of Fish and Game,
 - *Land Management Plan for the Rancho Jamul Ecological Reserve*, August 2006
 - *Hollenbeck Canyon Wildlife Area Management Plan*, August, 2006.
2. County of San Diego,
 - *Regional Land Use Element*, 1/11/95.
 - *Jamul/Dulzura Subregional Plan*, 1/11/95.
 - *Open Space Element*, 1/11/95.
 - *Seismic Safety Element*, 4/24/91.
 - *Scenic Highway Element*, 12/10/86.
 - *Jamul-Dulzura Community Trail and Pathway Plan*, undated.
 - *Multiple Species Conservation program Subarea Plan*, 10/22/97.
 - *General Plan 2020 Community Information Sheet* found at <http://www.sdcountry.ca.gov/cnty/cntydepts/landuse/planning/GP2020/comm/jamul.htm>
3. San Diego Regional Water Quality Control Board
 - *Regional Water Quality Control Board Basin Plan*, March 1994, as amended
 - *Clean Water Act Section 303(d) List of Impaired Waters, 2002 Update*, October 2001.
4. San Diego Association of Governments, *Average Daily Traffic Volumes*, 7/31/06.



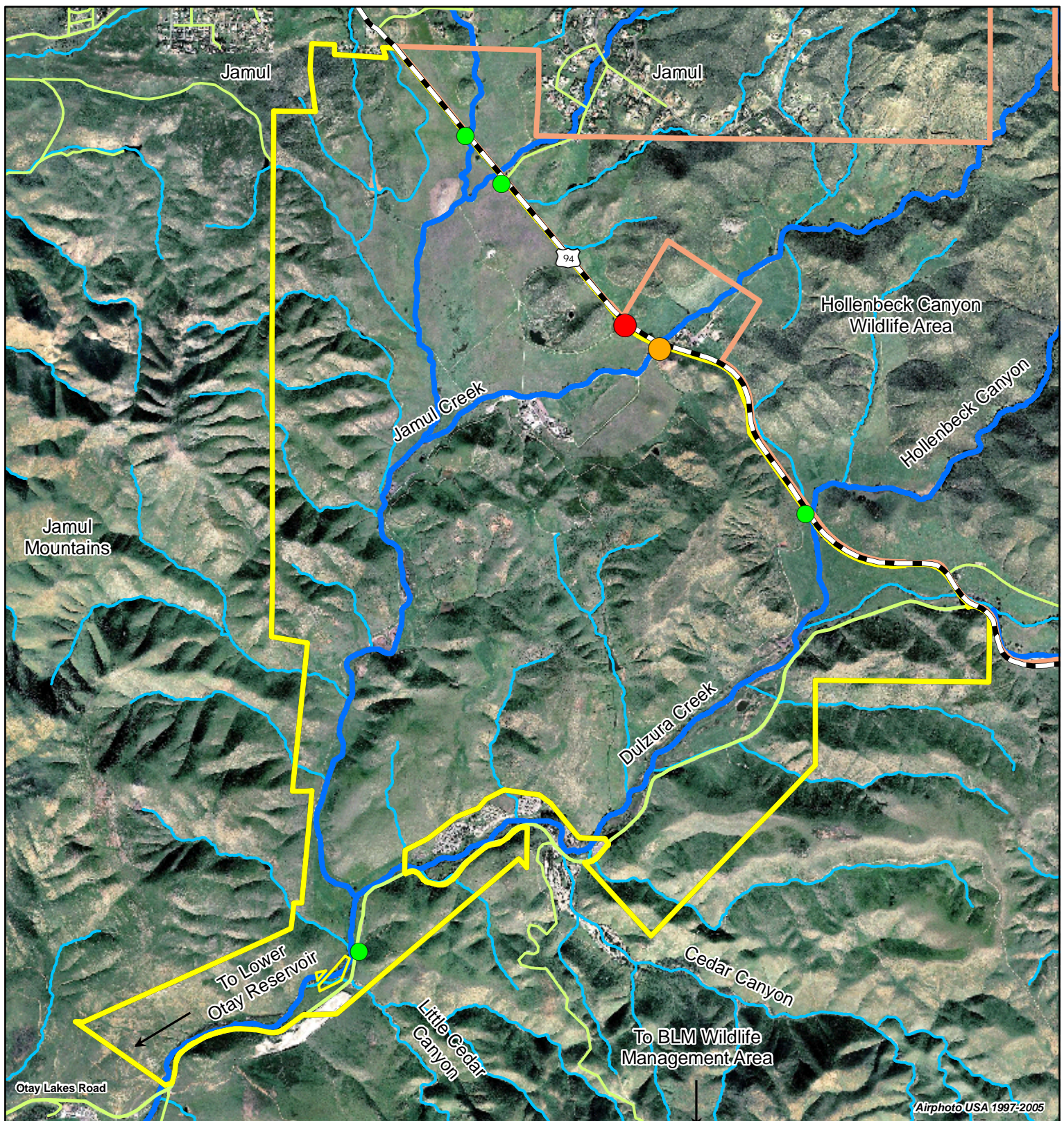


USGS 100,000 El Cajon Quadrangle

Basemap Legend
 RJER Boundary



Feet
 0 6,700



| MITIGATION MONITORING AND REPORTING PROGRAM CHECKLIST | | | | | | | | | | |
|---|---|--|----------------------------------|--------------------------|--|--------------------------------------|-------------------|-----------|------|----------|
| Mitigation Measure No. | Mitigation Measure | Method of Verification | Timing of Verification | | | | Responsible Party | Completed | | Comments |
| | BIOLOGICAL RESOURCES | | Contract/ Planning Process | Field Activi- ties | During Construction/ Maintenance | Post Construction/ Maintenance | | Initial | Date | |
| B-1 | Surveys and monitoring will be performed by a qualified biologist. | Require submission of qualifications statement when selecting biologists | X | | | | CDFG | | | |
| B-2 | Biological surveys and monitoring will follow protocols established by the Department and the U.S. Fish & Wildlife Service. | Review of work programs | | X | | | CDFG | | | |
| B-3 | Best management practices (BMPs) will be implemented whenever erosion or sedimentation could result from management activities. | Site inspection during construction or maintenance activity | | | X | | CDFG | | | |
| B-4 | Any habitat impact resulting of the use of heavy equipment will be restored to its original condition. | Site inspections | | | | X | CDFG | | | |
| B-5 | Activities that would directly or indirectly affect habitat occupied by sensitive species shall be conducted during the non-breeding season of the species in the project area. | Review of work program and scheduling of activities | | | X | | CDFG | | | |
| B-6 | New facilities will be placed in disturbed habitat whenever possible. | Review of plan documents | X | | | | CDFG | | | |
| B-7 | Temporary staging areas will be revegetated following the completion of construction. | Site inspections | | | | X | CDFG | | | |
| B-8 | Hand tools rather than mechanized equipment will be used whenever feasible. | Site inspections during construction or maintenance activity | | | X | | CDFG | | | |
| B-9 | All unavoidable impacts to sensitive habitats will be minimized and/or mitigated to a less than significant. | Review of plan documents and site inspections | X | | | | CDFG | | | |
| B-10 | Manage visitation to an appropriate level. | Program management | X | | | | CDFG | | | |
| B-11 | Prevent unauthorized activities through daily observation of visitor activities. | Site inspections | | X | | | CDFG | | | |
| B-12 | Repair damaged trails, parking areas, etc. | Site inspections | X | | | | CDFG | | | |

| MITIGATION MONITORING AND REPORTING PROGRAM CHECKLIST | | | | | | | | | | |
|---|---|--|----------------------------------|--------------------------|--|--------------------------------------|-------------------|-----------|------|----------|
| Mitigation Measure No. | Mitigation Measure | Method of Verification | Timing of Verification | | | | Responsible Party | Completed | | Comments |
| | BIOLOGICAL RESOURCES (cont'd) | | Contract/ Planning Process | Field Activi- ties | During Construction/ Maintenance | Post Construction/ Maintenance | | Initial | Date | |
| B-13 | Install educational signs and/or display cases to educate and inform the public regarding rules and regulations governing the use of the HCWA and access restrictions. | Review of annual work program | X | | | | CDFG | | | |
| B-14 | Regular monitoring of public use effects on existing ecosystems. | Site inspections | | X | | | CDFG | | | |
| B-15 | Closing trails where use is determined to have, or potentially have, an adverse effect on sensitive biological or cultural resources. | Site inspection | | X | | | CDFG | | | |
| | CULTURAL RESOURCES | | Contract/ Planning Process | Field Activi- ties | During Construction/ Maintenance | Post Construction/ Maintenance | | Initial | Date | |
| C-1 | Fencing or other barriers will be placed around identified cultural resource sites that could be disturbed by human encroachment such as hiking and hunting activities. | Include in annual work program | X | | | | CDFG | | | |
| C-2 | All grading and construction activities, and active human use areas, will be sited to avoid known cultural resource sites to the extent feasible. | Include in preparation of plan documents | X | | | | CDFG | | | |
| C-3 | A cultural resource investigation shall be conducted before any grading or public use occurs in an area that has not been surveyed for cultural resources. | Include in preparation of plan documents | X | | | | CDFG | | | |
| C-4 | Cultural resource investigations will be conducted under the guidance of a qualified cultural resource professional, as defined by the Secretary of Interior's Professional Qualifications Standards. | Require submission of qualifications statement when selecting biologists | X | | | | CDFG | | | |
| C-5 | Cultural resource investigations and treatments shall be conducted in accordance with federal and state of California regulations and standards concerning cultural resources. | Include in preparation of plan documents | X | X | | | CDFG | | | |

| MITIGATION MONITORING AND REPORTING PROGRAM CHECKLIST | | | | | | | | | | |
|---|--|--|----------------------------------|--------------------------|--|--------------------------------------|-------------------|-----------|------|----------|
| Mitigation Measure No. | Mitigation Measure | Method of Verification | Timing of Verification | | | | Responsible Party | Completed | | Comments |
| | CULTURAL RESOURCES (cont'd) | | Contract/ Planning Process | Field Activi- ties | During Construction/ Maintenance | Post Construction/ Maintenance | | Initial | Date | |
| C-6 | A final report for each investigation will be filed at RJER, and with the South Coastal Information Center, which manages the Historical Resources Inventory database for San Diego County, under the direction of the California Office of Historic Preservation. | Obtain receipt for delivery of documents | | | | X | CDFG | | | |
| C-7 | Treatments of standing buildings and structures will be completed as defined in the Secretary of the Interior's Standards for the Treatment of Historic Properties. Treatments. Treatment options include preservation, restoration, rehabilitation, or reconstruction. | Include in preparation of plan documents | X | | | | CDFG | | | |
| | LAND USE AND PLANNING | | Contract/ Planning Process | Field Activi- ties | During Construction/ Maintenance | Post Construction/ Maintenance | | Initial | Date | |
| L-1 | The Department shall resolve the conflict between the <i>Jamul-Dulzura Community Trail and Pathway Plan</i> and the HCWA LMP through discussions with the County of San Diego and amending the two plans as mutually agreed upon to achieve consistency between the plans. | Completion of meeting and amendment of plans | X | | | | CDFG | | | |